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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/942,833	08/29/2001	Mike Courtney	CNTW-008/00US	9218

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COOLEY GODWARD LLP
ATTN: PATENT GROUP
11951 FREEDOM DRIVE, SUITE 1700
ONE FREEDOM SQUARE- RESTON TOWN CENTER
RESTON, VA 20190-5061

EXAMINER	
PHAN, THAI Q	

ART UNIT	PAPER NUMBER
2128	

DATE MAILED: 12/19/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/942,833	COURTNEY, MIKE	
	Examiner	Art Unit	
	Thai Q. Phan	2128	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *12 September 2005*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1 and 3-36* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1 and 3-36* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *29 August 2001* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *09/12/2005*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

This Office Action is in response to applicant's amendment filed on 09/12/2005. Claim 2 was cancelled. Claims 1 and 3-36 are pending in the action.

Information Disclosure Statement

The Information Disclosure Statements filed on 09/12/ 2005 have been considered and recorded.

Claim Rejections - 35 USC § 112

Due to amendment, the 35 U.S.C. 112, second paragraph, rejection has been withdrawn.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. Claim 1 and 3-36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shafer, Philip, US patent application no. US 2002/0191619 A1.

As per claim 1, Shafer discloses a method and system for modeling a network router interface and configuring the device interface with feature limitations very similar

to the claimed invention. According to Shafer, the network device modeling and interface method includes means and steps:

Determining characteristics of the network device for interfacing (such as power, voltage, current, ports, i/o bandwidth, model device type, device configuration file for operation, etc) ([0033], [0037], [0042], [0044], [0057]-[0060]),

Retrieving a network configuration schema corresponding to the determined characteristic of the network device such as device model, type including manufacturer, etc, ([0020], [0037], [0042], [0044]) for network routing function, for example,

Retrieving a first of the plurality of configuration commands from the network device configuration corresponding to the network device, and

Generating XML file or object corresponding to the retrieved configuration command, wherein the XML object is generated according to the retrieved configuration schema ([0033], [0035], [0037], [0042]-[0059]). Shafer does not expressly disclose a portion of the retrieved configuration as claimed.

Practitioner in the art at the time of the invention was made would have found Shafer disclosure in the present US patent application with feature limitations of network router interface, command line formats translation, router configuration changes, etc. would require the claimed limitation of a portion of the configuration being used for a specific application such as a specific command line for router configuration change, command line for network device elements change, device configuration modules change, format translation or converting for device compatible, etc.

As per claim 2, Shafer discloses a plurality of network device modes, configuration files for each device module, network configuration schema, control operating systems, etc. as claimed.

As per claim 3, Shafer discloses the configuration schema for network configuration. Such schema would include a hash key for a network configuration schema and for schema portions for command interface.

As per claim 4, Shafer disclosure would include a hash table for network configuration schema, and for network routing and interface.

As per claim 5, Shafer implies a look up table for routing data in the network routers, for the retrieved configuration command, for example.

As per claim 6, Shafer discloses a configuration schema for a network connection and device operations. Such configuration schema would include tags or look-up table for mapping or hash function for network interface and for command line translation, for example.

As per claims 7-9, Shafer discloses a step of converting the XML object to an XML document and verifying with schema of validation ([0042]-[0046]).

As per claim 10, Shafer discloses a system and method for modeling a network router interface and for configuring the device interface for the network with feature limitations very similar to the claimed invention. According to Shafer, the network device modeling and interface system includes means and steps:

Determining characteristics of the network device, such configuration or an intermediate schema representation for network operation for interfacing between

systems (such as power, voltage, current, ports, i/o bandwidth, model device type, device configuration file for operation, etc) ([0033]-[0038], [0042]-[0059]),

Retrieving a network configuration schema corresponding to the determined characteristic of the network device such as device model, type including manufacturer, etc, ([0020], [0037], [0042], [0044]) for network routing function, for example,

Retrieving a first of the plurality of configuration commands from the network device configuration corresponding to the network device, and

Generating XML file or object corresponding to the retrieved configuration command, wherein the XML object is generated according to the retrieved configuration schema ([0033], [0035], [0037], [0038], [0042]-[0059]). Shafer does not expressly disclose a converter for converting XML as claimed.

Practitioner in the art at the time of the invention was made would have found Shafer disclosure in the present US patent application with feature limitations of network router interface, command formats translation, router configuration changes, etc. would require the claimed limitation of the XML converter for converting or translating CLI into XML format as claimed.

As per claims 11-12, Shafer discloses the claimed network router and network storage element in a network management system.

As per claims 13-15, Shafer discloses means for storing DOM and means for temporarily storing DOM ([0046]-[0049], [0057], [0060]).

As per claims 16-18, Shafer discloses means for translating or converting XML, CLI and interface means as claimed ([0057]-[0060).

As per claims 19-23, Shafer discloses a network router interface for modeling and configuring device interface with feature limitations very similar to the claimed invention. According to Shafer, the network device modeling and interface system includes means and steps:

Determining characteristics of the network device for interfacing (such as power, voltage, current, ports, i/o bandwidth, model device type, device configuration file for operation, etc),

Retrieving a network configuration schema corresponding to the determined characteristic of the network device such as device model, type including manufacturer, etc, ([0020], [0037], [0042], [0044]) for network routing function, for example,

Retrieving a first of the plurality of configuration commands from the network device configuration corresponding to the network device, and

Generating XML file or object corresponding to the retrieved configuration command, wherein the XML object is generated according to the retrieved configuration schema ([0033], [0035], [0037], [0042]-[0059]).

Shafer discloses DOM implementation or generator available in several programming languages used as a parser to compile and generate requests and replies in network device application interface [0046]-[0050] to connect network devices and render applications

Means for storing DOM and means for temporarily storing generated DOM implementation ([0046]-[0049], [0057], [0060]),

Means for translating XML, CLI and graphical user interface means as claimed ([0057]-[0060). Shafer does not expressly disclose a converter for converting XML as claimed.

Practitioner in the art at the time of the invention was made would have found Shafer disclosure in the present US patent application with feature limitations of network router interface, command line formats translation, router configuration changes, etc. would require the claimed limitation of the XML converter for converting or translating CLI into XML format as claimed.

As per claim 24, Shafer discloses a network router interface for modeling and configuring device interface with feature limitations very similar to the claimed invention. According to Shafer, the network device modeling and interface method includes means and steps:

Determining characteristics of the network device for interfacing (such as power, voltage, current, ports, i/o bandwidth, model device type, device configuration file for operation, etc),

Retrieving a network configuration schema corresponding to the determined characteristic of the network device such as device model, type including manufacturer, etc, ([0020], [0037], [0042], [0044]) for network routing function, for example,

Retrieving a first of the plurality of configuration commands from the network device configuration corresponding to the network device, and

Generating XML file or object corresponding to the retrieved configuration command, wherein the XML object is generated according to the retrieved configuration

schema ([0033], [0035], [0037], [0042]-[0059]). Shafer does not expressly disclose a portion of the retrieved configuration as claimed.

Practitioner in the art at the time of the invention was made would have found Shafer disclosure in the present US patent application with feature limitations of network router interface, command line formats translation, router configuration changes, etc. would require the claimed limitation of a portion of the configuration being used for a specific application such as a specific command line for router configuration change, command line for network device elements change, device configuration modules change, format translation or converting for device compatible, etc.

As per claim 25, Shafer discloses a plurality of network device models, configuration files for each device module, network configuration schema, control operating systems, etc. Such network device models and configuration schema for the network operation would include an intermediate configuration scheme for data transportation, for retrieving and transmitting data over the network. Shafer also discloses the configuration schema for network configuration. Such schema would include a network routing function or a hash key for a network configuration schema or for a portion of the schema.

As per claim 26, Shafer disclosure would include a look-up table or a hash function for the retrieved configuration command translation.

As per claim 27, Shafer discloses look-up keys or tables in the intermediate representation for network routers, configuration schema, and routing interface in a translated format such as the standard XML.

As per claim 28, Shafer discloses a configuration schema for a network connection and device operations. Such configuration schema would include tags or look-up table for mapping or hash function for network interface.

As per claim 29, Shafer discloses a method and system for modeling a network router interface and configuring the device interface with feature limitations very similar to the claimed invention. According to Shafer, the network device modeling and interface method includes means:

A network processor for routing data (Figs. 1-2),

A storage device connected to the processor for data and routing information storage,

A plurality of program instruction stored in the storage device, the instructions executed by the processor for

Determining characteristics of the network device for interfacing (such as power, voltage, current, ports, i/o bandwidth, model device type, device configuration file for operation, etc),

Retrieving a network configuration schema corresponding to the determined characteristic of the network device such as device model, type including manufacturer, etc, ([0020], [0037], [0042], [0044]) for network routing function, for example,

Retrieving a first of the plurality of configuration commands from the network device configuration corresponding to the network device, and

Generating XML file or object corresponding to the retrieved configuration command, wherein the XML object is generated according to the retrieved configuration

schema ([0033], [0035], [0037], [0042]-[0059]). Shafer does not expressly disclose a portion of the retrieved configuration as claimed.

Practitioner in the art at the time of the invention was made would have found Shafer disclosure in the present US patent application with feature limitations of network router interface, command line formats translation, router configuration changes, etc. would require the claimed limitation of a portion of the configuration being used for a specific application such as a specific command line for router configuration change, command line for network device elements change, device configuration modules change, format translation or converting for device compatible, etc.

As per claim 30, Shafer discloses a plurality of network device modes, configuration files for each device module, network configuration schema, control operating systems, look-up tables or hash key, etc. as claimed.

As per claim 31, Shafer discloses the configuration schema for network configuration. Such schema would include a look-up key (hashing) for a network configuration schema or for schema portions.

As per claim 32, Shafer discloses a look up table for routing data in network routers, for processing the retrieved configuration command, command line interface translation, for example.

As per claims 33-36, Shafer discloses a step of converting the XML object to an XML document and verifying with schema of validation ([0042]-[0046]).

Response to Arguments

Applicant's arguments filed on 09/28/2005 have been fully considered but they are not persuasive.

In response to applicant's argument Shafer does not teach determining one of a network device manufacturer, network device model, and network device operating system version" as recited in amended claims 1, 24 and 29, the examiner disagrees with. Shafer discloses steps determining characteristics of the network device for interfacing (such as power, voltage, current, ports, i/o bandwidth, model device type, device configuration file for operation, etc), retrieving network configuration schema corresponding to the determined characteristic of the network device such as device model, type including manufacturer's brand name, device configuration file for operation etc ([0020], [0037], [0042], [0044]) for network routing function, for example, and retrieving a first of the plurality of configuration commands from the network device configuration corresponding to the network device.

In response to applicant's argument Shafer does not disclose the recited "an intermediate schema presentation system" as in claim 10, the examiner disagrees with. Shafer discloses interface language for CLI (it's called intermediate schema representation) for system interfacing (([0033]-[0038], [0042]-[0059], [0057]-[0060]).

In response to applicant's argument Shafer does not disclose DOM generated in the manner to parse and combine the network devices, the examiner disagrees with. Shafer discloses DOM implementation or generator available in several programming languages used as a parser to compile and combine network device configuration files

or applications, generate requests and replies in network device application interface [0046]-[0050].

Conclusion

1. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

1. US patent application publication no. US 2003/0018765 A1, issued to Muhlestein et al

2. US patent application publication no. US 2003/0048287 A1, issued to Little et al.

2. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

3. Any inquiry concerning this communication or earlier communications from the examiner should be directed to examiner Thai Phan whose telephone number is 571-272-3783.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kamini Shah can be reached on 571-272-2279. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Nov. 14, 2005

Thai Phan
Patent Examiner